# Micro Motion Absolute™

Absolute Position at Startup After a Small Movement



#### **OVERVIEW**

Micro Motion Absolute™ Rotary Encoders provide absolute position after powering up your system, even if motion occurred when power was off. Our Micro Motion Absolute™ technology uses a small initial rotary movement on power-up so that your controller will know the absolute position with certainty. You can quickly restart with confidence even when sensitive, valuable work pieces are in the motion system.

Micro Motion Absolute™ Rotary Encoders acquire absolute position from their pre-programmed absolute track. By putting absolute position marks at unique locations, as soon as the motion control system passes through a small rotation, typically 4° – 7°, your controller will have absolute position.

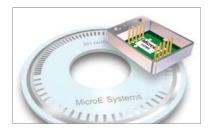
Position feedback is sent to the controller with BiSS or SPI high-speed serial formats using an FPGA in your controller

and software that is developed collaboratively with MicroE Systems. Single and multi-axis versions of the interface are possible.

Since Micro Motion Absolute<sup>TM</sup> Rotary Encoders are based on MicroE Systems' widely-used and proven optical encoder sensors, they have all of the benefits of our incremental encoders:

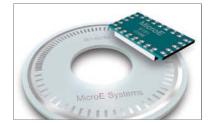
- High resolution, accuracy, and repeatability enables high precision motion feedback and servo control
- Small sensors, including models that can fit into the most compact spaces
- PC board mount-sensors, as small as 7mm x 11mm, that can fit onto a small PC board of any shape
- Low power consumption low as 0.3W
- Reliable long-life operation

### **FEATURES & TECHNOLOGY**



#### Mercury 1500P-MMA

- Resolution = 10,000 to 100,000 CPR using 18mm OD scale
- PC board mount
- Option for screw-mount sensor with cable



## ChipEncoder CE300-MMA

- Resolution = 5,000 to 50,000 CPR using 18mm OD scale
- PC board mount surface mount device
- Only 7mm x 11mm



## Mercury II 6000-MMA

- Resolution = 5,000 to 20M CPR using 18mm OD scale
- Small, screw-mount sensor with cable
- Highest accuracy and resolution